## Listing of Fills for Run 2000-2

Total Amount of User Time in this interval 1248.00 Hours

## User periods in this interval

05/11/2000 08:00 To 05/16/2000 08:00 120.00 Hours 05/16/2000 16:00 To 05/22/2000 08:00 136.00 Hours 05/24/2000 08:00 To 05/30/2000 08:00 143.00 Hours 05/30/2000 16:00 To 06/05/2000 08:00 136.00 Hours 06/07/2000 08:00 To 06/13/2000 08:00 136.00 Hours 06/13/2000 16:00 To 06/13/2000 08:00 136.00 Hours 06/21/2000 08:00 To 06/27/2000 08:00 136.00 Hours 06/27/2000 16:00 To 07/03/2000 08:00 135.00 Hours 07/03/2000 16:00 To 07/10/2000 00:00 152.00 Hours

Delivered Beam	1181.70 Hours
Percentage of Scheduled Time	94.69 %
Downtime During Period	66.30 Hours
Percentage of scheduled time SR current > 10 ma	96.05 %
Average Delivered Current During This Period	84.13 ma
Total integrated Current During This Period	99.50 A-hr

Data from an on going fill (if one exists) is not used in Fill length calculations.

Mean Fill Duration in Period 24.64 Hours
Mean Fill Duration from Poisson Fit 26.56 Hours
Mean Time Between Faults (MTBF) 25.16 Hours
Faults per Day of Delivered Beam 0.95

						Length Downtime is associated with the end of a fill.
Vali	d fills Begin	nina	in this Time	e Interval	Reason for	of The first fill of a period will have any
	.1# Start		End	Duration		Downtime downtime before the fill on the line above.
	.I# Start		Elia	Duracion	FIII Terminacion	Downtrime   downtrime before the fift on the fine above.
					 	0.12 Delays getting started
# 1	05/11 08:07	т-	05/11 15:19	7.20	   S16B:V3 glitch [PS]	
	· · · · · · · · · · · · · · · · · · ·		·			
	05/11 16:27	То	-		S22A:V4 jump [PS]	·
# 3	05/12 04:46	To	05/12 21:16	16.48	S39A:V1 glitch [PS]	0.45 recovery, injector turn-on
# 5	05/12 21:43	To	05/13 04:42	6.98	S38B:Q4 trip [PS]	0.74 recovery
# 6	05/13 05:26	To	05/13 06:37	1.17	S38B:Q4 trip [PS]	1.17 replace converter, and leaking converter above
# 7	05/13 07:47	To	05/13 10:24	2.61	S36A:V4 glitch [PS]	0.50 recovery
# 10	05/13 10:54	To	05/15 07:45	44.85	wf-S40A:Q1 trip [PS]	0.90 recovery, rf-3
# 12	05/15 08:39	То	05/15 14:29	5.84	Bldg 450 pumps trip[H2O]	0.74 recovery
# 13	05/15 15:13	То	05/15 20:49	5.60	VM-12-VV01 closed [CTL]	0.38 recovery
# 15	05/15 21:12	То	05/16 08:00	10.80	Int Dump: End of Period	· !
						0.00
# 17	05/16 16:01	То	05/17 01:46	9.75	rf#4 circ arc [RF]	0.31 recovery
# 18	05/17 02:05	To	05/17 03:51	1.77	rf#4 circ arc [RF]	0.29 recovery
# 21	05/17 04:08	То	05/18 14:14	34.09	PSS work wrg bmline[ISI]	1.19 recovery
# 23	05/18 15:25	To	05/18 23:10	7.76	S3A:Q1 trip [PS]	0.36 recovery
# 26	05/18 23:32	To	05/20 09:32	34.01	rf#4 crowbar [RF]	0.52 recovery
# 30	05/20 10:04	То	05/21 08:59	22.92	Ver beam mot S29A:V3[PS]	:

# 33 05/21 09:44 To 05/22 08:00 22.27	Int Dump: End of Period	0.02
# 35 05/24 08:01 To 05/25 17:56 33.92 # 37 05/25 19:37 To 05/26 14:19 18.70 # 39 05/26 16:17 To 05/27 07:47 15.50 # 40 05/27 09:03 To 05/27 20:02 10.98 # 42 05/27 20:25 To 05/28 10:03 13.63 # 44 05/28 10:42 To 05/28 22:59 12.28 # 46 05/28 23:28 To 05/29 00:03 0.59 # 48 05/29 01:07 To 05/29 14:49 13.69	ID4 EPS flow tran [ISI]   4ID work [BO]   scraper problem [DIA]   Not Determined [OTH]   S2A:V3, S2A:H3 [PS]   S2A:V3, S2A:H3 [PS]   S2A:V3, S2A:H3 [PS]   S10EA1 water flow [H2O]	0.00 1.68 troubleshooting, recovery 1.96 recovery, repairs 1.27 recovery 0.38 recovery 0.66 recovery, tuning?? 0.48 recovery 1.07 recovery 1.78 troubleshooting, recovery
# 49 05/29 16:36 To 05/30 08:00 15.40	Int Dump: End of Period	0.00 
# 63 06/07 08:38 To 06/07 19:06 10.47 # 64 06/07 20:22 To 06/08 11:06 14.72 # 66 06/08 11:59 To 06/08 17:13 5.23 # 68 06/08 18:03 To 06/10 09:06 39.06 # 72 06/10 09:48 To 06/11 15:25 29.62 # 75 06/11 17:49 To 06/13 08:00 38.18	rf3 mod anode OI [RF] quad glitch S36/37 [PS] rf trip [RF] rf4 mod anode trip [RF] S31B:V3 drift [PS] Int Dump: End of Period	0.63 BPM status error, S9A:H3 USDac problem 1.27 recovery, 2nd trip of rf3 problems tuning linac 0.89 recovery, problems tuning linac 0.84 recovery, trouble tuning linac 0.70 recovery
# 78 06/13 16:00 To 06/14 18:50 26.84 # 80 06/14 19:48 To 06/15 09:28 13.68 # 84 06/15 11:06 To 06/17 07:45 44.65 # 88 06/17 09:16 To 06/19 08:00 46.72	S30A:V2 drift [PS]   rack wrk lost power[ISI]   rf3 mod anode OI [RF]   Int Dump: End of Period	0.00 0.96 recovery, linac switchover 1.63 linac trip (emerg. off button bumped) 1.53 orbit problems caused by iocs29vp out of memory 0.01
# 96 06/21 08:18 To 06/23 12:44 52.64 # 99 06/23 14:04 To 06/23 21:48 7.74 #101 06/23 23:25 To 06/24 00:02 0.62 #102 06/24 04:02 To 06/24 07:27 3.42 #103 06/24 23:55 To 06/25 07:56 8.01 #104 06/25 08:10 To 06/25 22:01 13.84 #106 06/25 22:39 To 06/26 06:23 7.73 #107 06/26 06:52 To 06/26 23:34 16.70	unidentified motion[OTH]  S15B:Q4 trip [PS]  S15B:Q4 trip [OPS]  switchgear arc [OTH]  wf, scrapers [DIA]  rf pss system trip [RF]  S8A:H2 lost output [PS]  S2B:V2 lost output [PS]  Int Dump: End of Period	•
#109 06/26 23:49 To 06/27 08:00 8.18  #110 06/27 16:01 To 06/29 10:00 41.98  #111 06/29 11:22 To 07/01 11:40 48.30  #112 07/01 12:18 To 07/03 08:00 43.69  #113 07/03 16:06 To 07/04 03:33 11.45	Int Dump: End of Period    S17A:S4 replacement [PS]   S18:B:Q1 trip [PS]   Int Dump: End of Period	0.00   0.00   1.37 x-ray BPM readback problem   0.63 SR rf2 investigations   0.00   0.09 Orbit correction problems   0.51 recovery
#115 07/04 04:03 To 07/06 12:12 56.14	RM8 trips [OTH]	1.76 subsequent trip of RM8, replacement of RM8

#119 07/06 13:57 To 07/09 13:36 71.65 | rf4 trips [RF] | 3.52 Subsequent rf4 trips #123 07/09 17:07 To 07/09 23:59 6.87 | Int Dump: End of Period | 0.00

Additional Downtime was assessed, and accounted for in statistics presentations, when the MCR had to open all Insertion Device Gaps because of problems with Input-Output Controllers (IOCs) for the Storage Ring Power Supplies. During the run, this occurred once accounting for an additional .88 hours of downtime assessed to the Controls Group.

5/26/00 17:02 5/26/00 17:55 0.88 Reboot of iocs37vp